Cox® Distraction Treatment of A Large L4-5 Disc Herniation

submitted by
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HISTORY:

A 25 year old Hispanic male presented to the office by patient/employer referral for diagnosis and treatment of severe, persistent left buttock, hip and sciatic pain to the toes. He described it as aching, sharp, numb, weak and shooting. It was constant and worse with sitting, walking or standing and relieved somewhat with lying down. He stated this pain began after lifting a heavy object at the dairy farm. It began as severe lower back pain approximately one month prior to his initial visit here and evolved into sciatica to the toes as the low back pain dissipated.

EXAMINATION:

Observation of the lumbar spine demonstrated an antalgic flexion posture in severe pain. Fetal position was the most comfortable position for the patient. Pain on palpation was evident from the L3 into the L5-S1 left paraspinals and along the L5 dermatome/myotome to the left foot. The deep tendon reflexes were 2/2 on the right patella and Achilles reflexes. Right hamstring reflex was 2/2 and 0/2 on the left hamstring reflex. The muscle strengths were 5/5 in the lower extremities with the exception of left dorsiflexion of the foot at -4/5. Dermatomal evaluation of the lower extremities demonstrated hypesthesia of the left L5 dermatome to the toes. Valsalva sign was negative for radicular pain. Valsalva and seated Linder's coupled created lower back pain. Range motion lumbar spine measured at 70 degrees flexion without increased pain, lateral flexion to the right 20 degrees with pain. Left lateral flexion was 25 degrees and painless. Rotation was 20 degrees bilaterally without pain. The patient was unable to extend the lumbar spine beyond 10 degrees without creating severe radicular pain. The patient was unable to heel walk on the left due to a combination of pain and weakness. Recumbent right straight leg raise was positive with Cox sign and severe pain to the foot at 20 degrees. Left well leg SLR was negative.

Imaging Studies:


Figure 1

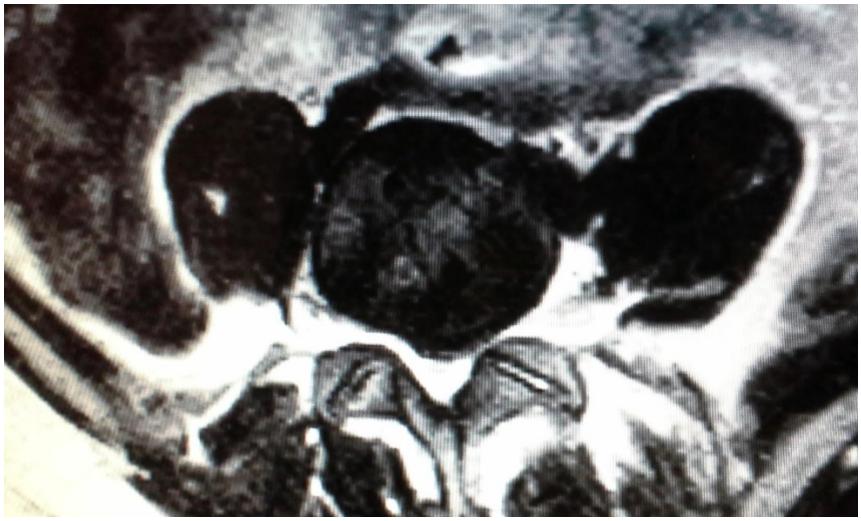
Figure 2

Impression:

1. Mild levoscoliosis centered at L2-3. Degenerative change with disc bulge measuring 3 mm at L2-3 and bilateral facet hypertrophy causing mild dural compression.
2. Degenerative change with disc bulge measuring 3 mm and bilateral facet arthropathy causing mild dural compression at L3-4.
3. Degenerative change with left central disc protrusion measuring 8 mm at L4-5 causing moderate dural compression and minimal left neural foraminal stenosis.
4. Degenerative change with disc bulge measuring 5 mm and posterior annular fissure and bilateral facet arthropathy at L5-S1 causing mild dural compression and mild left neural foraminal stenosis.

TREATMENT

Goals:

The initial treatment goals were to relieve the nerve root compression and reduce spinal stenosis with Cox® Technic flexion distraction manipulation while substantially reducing the patent's radiculopathy. I explained to this patient the nature of his diagnosis and the treatment protocol associated with it. Different treatment options were discussed both conservative, quasi-conservative (steroids oral and injected) and/or surgical intervention. My report of findings suggestion was to treat for approximately four weeks for 50% overall improvement in the patent's symptoms. If achieved then we would continue without diagnostic studies. Should the patient fail to improve or if his neurological symptoms were to worsen, an MRI would be warranted and ordered.

Methods:

This patient was treated with Cox® Technic Flexion Distraction Manipulation (Protocol I). A Dutchman roll under the patient's abdomen was necessary due to the patient's small waistline. The first 3 visits he was given physiotherapy and ½" caudal distraction with the palmar hand placement at T7-8. (Note: I chose this because the pain of a lumbar contact created radicular symptoms and precluded the use of F/D at that level. Rather than lose out on any decompressive benefit, I chose to find a further cephalad level that would allow decompressive treatment within the Protocol I.) He was given Interferential current/Tetanizing current and hot/cold packs on the exiting L5 nerve root into the left lower leg for 20 minutes. Deep retrotrochanteric goading was provided to tolerance with each visit. This patient was given a lumbosacral support to be worn 24 hours per day for the first 1-3 weeks. He was prescribed Discat Plus. Cox® lumbar spine exercise program (exercises 1-3) was started immediately.

Treatment Outcomes:

Treatment began on August 25, 2014 and ended on November 13, 2014. During the first visit I referred him to the medical doctor in our integrative medical clinic for pain control/inflammation reduction steroid due to the severity of the pain. The patient was given a Medrol Dosepac. Interestingly, after the first week he stated that he did not feel that the medication helped the pain levels which is unusual in my experience. He received 3 treatments per week for 4 weeks. This afforded him 50% relief in the leg and an ascending pattern of pain that is a hallmark of improvement. He was then given the first 5 exercises to continue, with caution on the hamstring stretch so as not to aggravate the left L5 nerve. He was to wear the brace when up and about or prolonged car rides (he traveled 1 hour to and from the office). Due to his and his employer's wishes, he decided to return to work on the dairy farm driving heavy equipment. This lasted two days. The pain returned strongly into the leg and he had to stop. He returned to care and was seen twice per week for the next six weeks for a total of 31 treatments. Treatment resulted in complete relief of the right lower extremity pain, and 80% relief of the buttock and hip pain. He was told to return to work on a trial basis and spend no longer than 2 hours at a time on the heavy equipment. He contacted his employer with this requirement and was told there was no longer a job for him.

Discussion:

This is a good example of successful treatment on a large medial disc sequestration. The patient was cooperative and the outcome was as desirable as can be expected in under three months. As our research with Cox® Technic points out, with disc herniation 86% are maximally improved in less than 3 months, 36% need more than 20 visits, 30% need more than 30 visits. Unfortunately he lost his job, but it was pointed out to him that the nature of seated vibration for hours is a sure way of creating more problems in the spine for years to come.